REMARKS

Applicant has carefully studied the Final Office Action of April 21, 2005, and offers the following remarks to accompany the above amendments.

Initially, Applicant cancels claims 18, 19 and 21, mooting the rejections of these claims. Applicant reserves the right to pursue the subject matter of these claims at a later time in a continuation application.

Before addressing the rejections based on the references, Applicant provides a brief summary of the present invention so that the remarks relating to the references are considered in the proper context. The present invention is directed to a system of distributed registries within directory service utilities that identify service providers and the addresses thereof so that a user may access a desired service. To this end, the present invention provides a series of distributed registries. A user sends a query to one of the registries of service providers with an indication of what sort of attributes are required for a desired service. The registry then searches its entries to determine if a service provider matches the query. If the answer is yes, the registry does have such an entry, then the registry sends identifying information (typically an address) to the user, such that the user may access the service provider and receive the desired service.

If, however, the answer is no, the registry does not have an entry that can satisfy the query, then the registry relies on the other registries at the other directory service utilities within the system of distributed registries. To this end, the registries are arranged hierarchically, and the query is passed up the hierarchy in hopes that somewhere else in the hierarchy there is an entry within the system of registries which can satisfy the query.

Claims 1, 3, 4, 6-12, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Pettus. Applicant respectfully traverses. For the Patent Office to establish anticipation, the Patent Office must show where in the reference each and every element of the claim is shown. Furthermore, the elements of the reference must be arranged as claimed. MPEP § 2131. Anticipation is a rigorous standard that has not been met by the Patent Office in this application.

Claim 1 recites "if none of said plurality of service providers in said registry can provide said requested data network service having said required attributes, selecting a remote directory service utility; and sending a propagated query to said remote directory service utility." Claims 9-12 and 22 recite substantially similar elements. The remote directory service utility is not shown by Pettus.

7

The Patent Office asserts that Pettus shows the claim element at col. 15, line 61-col. 16, line 7. Applicant respectfully traverses. Pettus, col. 15, line 61-col. 16, line 7 states in full:

> In accordance with step 1206, application program 1100 then activates the service object reference. FIG. 13 indicates, in more detail, the steps involved in activating the service object reference. More particularly, the activation routine starts in step 1300 and proceeds to step 1302. In step 1302, the service object reference is resolved in any of the underlying physical directory services, if appropriate. This resolution is performed by using the service name located in the service object to search over the underlying directory services and to obtain the network address. Alternatively, if the service reference is registered in the native namespace of the communications directory service 1112, then the service address or the service exchange can be obtained directly from the service object reference.

Contextually, the passage describes an application program 1100 activating a service object reference that it has secured from the communications directory service 1112 (see Pettus, col. 15, lines 33-59). It is important to note the relationship between a communication directory service and a physical directory service. Pettus describes the physical directory services at col. 8, lines 41-44 as being conventional directory services, contrasted with the communications directory service modules of Pettus's invention. Pettus further describes how the physical directory services are conceptually positioned within each communications directory service module (see Pettus, col. 10, lines 20-24). Thus, when the communications directory service module searches the physical directory services, the communications directory service is essentially searching itself and is not communicating with remote communications directory services.

The Patent Office has identified the communications directory service module as being the claims' "registry of a plurality of service providers" (see Office Action, p. 2, lines 13-14). Thus, when Pettus, col. 15, line 61-col. 16, line 7 describes searching the underlying physical directory services, Pettus is describing an internal search function for the communication directory service module. Such an internal search function is not selecting a remote directory service utility as recited in the claims, nor is it sending a propagated query to said remote directory service utility as recited in the claims.

In short, Pettus does not teach or suggest the remote directory service utility recited in claims 1, 9-12, and 22. Since Pettus does not teach or suggest the remote directory service utility of the claims, the Patent Office has not established anticipation for claims 1, 9-12, and 22.

8

Likewise, the Patent Office has not established anticipation for dependent claims 3, 4, and 6-8. Applicant requests withdrawal of the § 102 rejection of claims 1, 3, 4, 6-12, and 22 at this time.

In response to Applicant's previous arguments on this point, the Patent Office states that Pettus discloses, at col. 15, line 61-col. 16, line 7 and col. 16, lines 13-16, the method of selecting remote directory service utilities and obtaining network service attributes by searching underlying directory services. As explained above, the first citation to Pettus does not show the element because the search of the underlying physical directory services is not selection of a remote directory service utility, nor is there a query propagated to a remote directory service utility.

Pettus, col. 16, lines 13-16 states in full: "These stack definitions then set DRPS 1124 and configure the communication link in preparation for sending request and reply data between the application program 1100 and the remote service (not shown in FIG. 11)." While this passage does show the application program receiving the service requested, this is not a selection of a remote directory service utility, nor is this propagation of a query to the remote directory service utility as recited in the claims. Thus, Pettus still fails to show where a first directory service utility selects a remote directory service utility and propagates a query thereto. Since Pettus fails to show this element, Pettus cannot anticipate the claims.

Claims 9-12 deserve special mention because they make it explicitly clear that the maintenance of a registry of a plurality of service providers takes place in a first directory service utility and that the remote directory service is different from the first directory service.

Claim 5 was rejected under 35 U.S.C. § 103 as being unpatentable over Pettus in view of Hemphill et al. (hereinafter "Hemphill"). Applicant respectfully traverses. For the Patent Office to establish obviousness, the Patent Office must show where each and every element of the claim is shown in the combination of references. MPEP § 2143.03.

As explained above, Pettus does not teach or suggest the remote directory service utility of claim 1. Claim 5 depends from claim 1, and includes the same element as claim 1. Applicant has studied Hemphill and finds no teaching or suggestion within Hemphill for such an element. Since the references individually do not teach or suggest the claim element, the combination of references does not teach or suggest the claim element. Since the combination of references does not teach or suggest the claim element, the Patent Office has not established *prima facie*

9

obviousness. Since the Patent Office has not established obviousness, claim 5 is allowable. Applicant requests withdrawal of the § 103 rejection of claim 5 at this time.

Applicant requests reconsideration of the rejections in light of the amendments and remarks presented herein. Pettus and the other references of record do not teach or suggest a remote directory service utility as recited in the claims. Applicant earnestly solicits claim allowance at the Examiner's earliest convenience.

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By: _____

Taylor M. Davenport
Registration No. 42,466
P.O. Box 1287
Cary, NC 27512
Telephone: (919) 654-4520

Date: June 21, 2005
Attorney Docket: 7000-415

CERTIFICATE OF TRANSMISSION
I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING
TRANSMITTED VIA FACSIMILE ON THE DATE INDICATED BELOW
TO:

Examiner: Ailes, Benjamin A.   Art Unit: 2142   Fax: 703-872-9306

REBECCA ROOKS
Name of Sender

Rebecca A. Rooy
Signature

6-21-05
Date of Transmission

10